

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Patent Application of: Mansky et al.

Serial No. 09/210,485

Group Art Unit: 2857

Filed: December 11, 1998

Examiner: H. Wachsman

For: APPARATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS  
CHARACTERIZATION

28/A  
Range  
7/23/06  
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Commissioner for Patents  
Washington, D.C. 20231

JUL 9 2002

AMENDMENT AND RESPONSE

TECHNOLOGY CENTER 2800

Sir:

In response to the Office Action dated December 5, 2001, please amend the above-identified application as follows:

CLEAN VERSION OF AMENDMENTS

In the specification:

On Page 78, Line 14, please insert the term --Copending-- prior to the term "U.S. Application" such that the clean version of the paragraph reads:

*Ref 8, 1*  
In this example, surface launched acoustic wave sensors can be fabricated on thin silicon-nitride or etched silicon membranes 174 similar to those described above. A piezoelectric material 176, such as zinc oxide, is then deposited as a thin layer on top of the membrane to produce an acoustic wave sensing device. The physical dimensions of the electrode, such as its thickness, size, and configuration, can be adjusted so that the electrode operates in, for example, a surface acoustic wave (SAW) resonance mode, a thickness shear mode (TSM), a flexural plate wave (FPW) resonance mode, or other resonance mode. When the electrode acts as a resonator, its resonating response is affected by, for example, the sample's viscosity and density. Copending U.S. Application No. 09/133,171 to Matsiev et al, filed August 12, 1998, describes mechanical resonators in more detail and is incorporated by reference herein.